

Claims

1. A hand-held power tool, having a housing (12) and a tool (70), which is
5 located on the housing so as to be capable of rotating and/or orbiting and which
can be operated as intended by means of a suction air flow, in particular with a
vacuum cleaner, characterized in that a turbine (36) with a turbine wheel (38)
serves as the drive mechanism and is provided with means for calming the
inflowing and outflowing air, in particular with an upstream baffle (74) and/or a
10 downstream baffle, and the turbine wheel (38) is sealed off by a labyrinth seal (51)
from a turbine housing (60) that protects the turbine (36) against a pressure loss.

2. The hand-held power tool as recited in one of the foregoing claims,
characterized in that the upstream baffle (74) serves as a bearing seat (76) for a
15 bearing (66) of the axial shaft (72).

3. The hand-held power tool as recited in one of the foregoing claims,
characterized in that the upstream baffle (74), with an engagement region for a
protrusion or into a protrusion of an axially adjacent part, in particular a mass
20 compensator, forms a labyrinth seal.

4. A hand-held power tool, having a housing (12) and a tool (70), which is
located on the housing so as to be capable of rotating and/or orbiting and which
can be operated as intended by means of a suction air flow, in particular with a
25 vacuum cleaner, characterized in that a turbine (36) with a turbine wheel (38)
serves as the drive mechanism and is provided with means for calming the
inflowing and outflowing air, in particular with an upstream baffle (74) and/or a
downstream baffle, and the turbine has a compensation mass (78), coupled to the
axial shaft (72), that together with structures of an axially adjacent component,
30 especially protrusions and recesses (80, 82) of the upstream baffle (74), forms a
labyrinth seal (84).

5. The hand-held power tool as recited in one of the foregoing claims,
characterized in that the upstream baffle (74) is built into the structure of the

housing (12) in such a way that it reinforces the housing.

5 6. The hand-held power tool as recited in one of claims 1 through 5,
characterized in that the air for driving the turbine wheel (38) is brought to the
turbine wheel radially outside of it and is then extracted by suction radially
obliquely inward from the outer edge of the turbine wheel (38).

10 7. The hand-held power tool as recited in one of the foregoing claims,
characterized in that it is designed as a surface sander, in particular as an orbital
sander.